Hoisting & Rigging Inspection Checklist

<u>Prior to the use</u> of an Ames Laboratory Hoist/Crane, the following inspection items are to be checked to insure that the equipment is in good working order and that operation will not endanger personnel or property. The following inspection needs to be completed only once per day that the hoist/crane is operated.

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An explanation of the inspection items listed below and the inspection procedures can be found on the back of this form. Place an "O" in the box if an inspection item checks out "OK". Place an "X" in the box if an inspection item is deemed unsatisfactory. When an item is marked with an "X", fill out the back of this form to indicate the malfunction and the corrective action. All items must be marked with an "O" before using the equipment and rigging.

Date	1.Load Hook & Blocks	2. Wire Rope or Chains	3. Cracked or Worn Sheaves & Drums	4. Bridge Wheels and Bearings	5. Trolley and Rails	6. Hydraulic Hoses, Pump & Controls	7. Tires and Wheels (Where Applicable)	8. Bumpers/End Stops	9. Current Inspection Sticker	10. Capacity Posting	11. Electrical Disconnect Accessible	12. Lubrication	13. Rigging Equipment in (Synthetic Slings, Chains, Wire Rope)	14. Structural	15. PPE (Personal Protective Equipment)	Initials
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Hoisting & Rigging Inspection Checklist Instructions

If damage to the Hoist/Crane or Rigging is noted or a checklist item does not meet the criteria described below, the user should contact their supervisor to determine a corrective course of action. <u>Do not use the equipment until all checklist items are listed as "OK" per the instructions below</u>. Follow the instructions below for each of the Hoists/Cranes and Rigging Inspection Checklist Items:

- 1. Load Hook & Blocks Inspect the load hook for twist, expansion of throat opening and wear. Inspect the load blocks for obvious damage (cracks, wear, rust, etc.) and lubrication. Any damage that jeopardizes the workability of the equipment or its ability to carry a load should be noted.
- 2. Wire Rope or Chains Inspect the wire rope for broken wires, kinking, bird-caging, chemical damage, etc. Inspect chains for worn links, stretching, chemical damage, etc.
- 3. Cracked or Worn Sheaves and Drums Check for surface defects such as catches, binding, lubrication, etc.
- 4. Bridge Wheels and Bearings Check wheels for damage/wear and bearings for damage and lubrication.
- 5. Trolley and Rails Inspect trolley and rails for smooth operation, no damaged welds, proper connections, etc.
- 6. Hydraulic Hoses, Pump & Controls Inspect hoses, pump and controls for leakage, splits/cracks in hoses and any obvious damage.
- 7. Tires/Wheels For mobile hoists/cranes inspect the tires or wheels for damage and ensure they are lubricated for smooth operation.
- 8. Bumpers/End Stops Inspect bumpers and end stops to ensure they are in place and firmly secured.
- 9. Current Inspection Sticker Ensure the annual inspection sticker is current. If not, contact ESH&A or Engineering Services for inspection.
- 10. Capacity Posting Inspect the hoist/crane to ensure the unit is posted with the maximum weight load capacity.
- 11. Electrical Disconnect Accessible For electrical hoists/cranes ensure the electrical disconnect is immediately accessible.
- 12. Lubrication Inspect all moving parts to ensure they move freely.
- 13. Rigging Equipment (Synthetic Slings, Chains and Wire Rope):
 - Inspect Synthetic Slings for melting or charring, acid or caustic burns, snags, punctures, tears or cuts, broken or worn stitches and distortion of hardware or fittings.
 - Inspect Chains for stretching, binding, wear, nicks and gouges.
 - Inspect Wire Ropes for kinking, bird caging, wear, broken wires, etc.
- 14. Structural Inspect welds and frame for any obvious damage.
- 15. PPE (Personal Protective Equipment)— Inspect PPE including gloves, steel-toed shoes and hard hats to ensure proper fit and effective protection.

If any of the items above are deemed unsatisfactory, fill out the following form and forward to ESH&A or Engineering Services to correct:

Date	Checklist	Description of Unsatisfactory Condition	Date	Corrected by
	Item #	Description of Cheatistactory Condition	Corrected	(Employee #)

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